

## FREQUENTLY ASKED QUESTIONS

**Q1: Even with permissions and opt-ins, doesn't this reveal their physical movements, providing clues to their relationships and social networks, their political and religious convictions. How do we ensure that the system does not become a surveillance tool?**

A rigorous Incognito environment can enable the Scoring Authority to compute Scores without needing to identify people, and the Health Authority to work only with Scores and Tests without needing access to any other data. States are encrypted cryptographically and shared via a certificate issued by the Health Authority. It has an issue and expiration date, and can be revoked by the Health Authority if their Score and Risk change.

Even in the most feared scenario that the solution could be transformed into a digital surveillance tool, we should leave it to the policy debate as opposed to the capability debate.

**Q2: What about false positives? An extreme example would be that a person wears full protective gear like a paramedic to visit a semi-hot virus zone. Will the system flag them inappropriately?**

The system maintains three states - Tested Positive (Red), Tested Negative or conferred Immunity(Green), and Not Tested (Orange). It can use machine learning algorithms that compute the Health Score by predicting the likelihood of someone being infected based on their physical movements. For example, if you are in a relatively safe community, but that community starts to become hot, the system can notify you that you need to isolate more.

There might be some false positives initially, but the predictions get more accurate as more people opt-in, and Test and contagious hotspots data increases.

**Q3: Who takes the liability for false negatives? What if a person is allowed entry because the system scores them to be not-contagious, but they end up infecting others.**

The system learns to make more accurate predictions as more people opt-in, and more Testing data becomes available. It can be configured to play it very safe (allowing in people within a narrow Score range), and relaxing it when predictions become more precise. Until then, it will deny entry to people with a low medium to high Score, and allow the individual business to pick a State threshold within a safe operating range.

**Q4: How do the Scoring Authority and the Health Authority work?**

Scoring Authority works with anonymized Contact Tracing data to compute Health Scores and States for people. It does not know the real-world identity of a person as it uses cryptographically encrypted identifiers.

The Health Authority can only get the State and Score of a person from the Scoring Authority using encrypted identifiers. When it issues a digitally signed certificate to a person, it bundles a set of claims such as the Health Score, metadata such as Validity period, along with the credential identifier. It does not have access to data that the Scoring Authority has.

**Q5: How does someone dispute their State?**

They get themselves tested again, and submit their new Test results. Once the results are verified, the Health Authority expires the old certificates, and issues new certificates notifying the individual and the Scoring Authority which recomputes the Score, and State.